

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
27 January 2005 (27.01.2005)

PCT

(10) International Publication Number  
**WO 2005/008358 A2**

(51) International Patent Classification<sup>7</sup>: **G06F**

(21) International Application Number:  
PCT/IL2004/000667

(22) International Filing Date: 22 July 2004 (22.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/489,768 22 July 2003 (22.07.2003) US

(71) Applicant (for all designated States except US): **KINOR TECHNOLOGIES INC.** [US/IL]; P.O. Box 45187, 91450 Jerusalem (IL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **TOLEDANO, Zev** [IL/IL]; 29/6 Haliat Hano-ar Street, 97234 Jerusalem (IL). **YEHUDA, Yair** [IL/IL]; Mitspe Netofa 51, Lower Galilee 15295 (IL).

(74) Agents: **SANFORD T. COLB & CO.** et al.; P.O. Box 2273, 76122 Rehovot (IL).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: INFORMATION ACCESS USING ONTOLOGIES

(57) Abstract: A method for data access includes defining an ontology for application to a set of diverse data sources (58) comprising data having predefined semantics, and associating with the ontology one or more logical rules applicable to the semantics of the data in the data sources. Upon receiving a query from a user regarding the data, a query plan is determined for responding to the query by selecting one or more of the data sources responsively to the ontology and by identifying an operation to be applied to the data responsively to the applicable logical rules. A response to the query is then generated in accordance with the query plan. 2

WO 2005/008358 A2

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
27 January 2005 (27.01.2005)

PCT

(10) International Publication Number  
**WO 2005/008358 A3**

(51) International Patent Classification<sup>7</sup>: **G06F 17/30**

(21) International Application Number:  
PCT/IL2004/000667

(22) International Filing Date: 22 July 2004 (22.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/489,768 22 July 2003 (22.07.2003) US

(71) Applicant (for all designated States except US): **KINOR TECHNOLOGIES INC.** [US/IL]; P.O. Box 45187, 91450 Jerusalem (IL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **TOLEDANO, Zev** [IL/IL]; 29/6 Haliat Hano-ar Street, 97234 Jerusalem (IL). **JEHUDA, Jair** [IL/IL]; Mitspe Netofa 51, Lower Galilee 15295 (IL).

(74) Agents: **SANFORD T. COLB & CO.** et al.; P.O. Box 2273, 76122 Rehovot (IL).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

(88) Date of publication of the international search report:  
21 April 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: INFORMATION ACCESS USING ONTOLOGIES

(57) Abstract: A method for data access includes defining an ontology for application to a set of diverse data sources (58) comprising data having predefined semantics, and associating with the ontology one or more logical rules applicable to the semantics of the data in the data sources. Upon receiving a query from a user regarding the data, a query plan is determined for responding to the query by selecting one or more of the data sources responsively to the ontology and by identifying an operation to be applied to the data responsively to the applicable logical rules. A response to the query is then generated in accordance with the query plan. 2

WO 2005/008358 A3